

ABSTRACT

The present invention is a method for measuring an amount of strain of a bonded strained wafer in which at least one strained layer is formed on a single crystal substrate by a bonding method, wherein at least, the bonded strained wafer is measured with respect to two asymmetric diffraction planes with diffraction plane indices (XYZ) and (-X-YZ) by an X-ray diffraction method, a reciprocal lattice space map is created from the measured data, and the amount of strain of the strained layer is calculated from the peak positions for the respective diffraction planes of the single crystal substrate and the strained layer appearing on the reciprocal lattice space map. Thereby, there can be provided a method for measuring an amount of strain by which amounts of strain in the horizontal direction and in the vertical direction of the strained layer by an X-ray diffraction method in a bonded strained wafer can be measured in a shorter time and more simply.